

closely allied to but distinct from the *E. abbreviatus*, Guérin, Voy. Coq. Zool. ii. 193.

CEROPLASTES, Gray.

*Coccus* (*Ceroplastes*) *jamaicensis*, White. Mr. Gray in the 'Spicilegia Zoologica' (p. 7. tab. 3. f. 6. and 7) has described and figured two species of a singular insect of the family *Coccidæ*, found by the late Lady Callcott during her residence in Brazil. For their reception he has formed the genus *Ceroplastes*, characterized as follows:—

"The seven plates, of which the covering of the female is composed, are arranged in two lateral pairs, and a central series consisting of an anterior, a dorsal and a posterior plate; the nucleus of the six marginal plates is close to the lower edge, that of the dorsal one nearly central." The two species described are *C. chilensis*, large, white, pellucid, the plates nearly equal in size, the dorsal flattish; it was found on the branches and peduncles of a tree with pinnated leaves: the second species, *C. janeirensis*, is smaller, brownish, subopaque, hemispherical, the dorsal plate convex; it was found on a species of *Solanum* with simple lanceolate velvety leaves.

In the 'Philosophical Transactions' for 1794, p. 383, Dr. Pearson described an insect allied to the above under the name of "White-lac," somewhat similar to the Pe-la of the Chinese. Mr. Gray, in his memoir, refers to species of similar insects as having been found by Humboldt and D'Azara. The occurrence of another distinct species of this genus, in a collection made by Mr. Gosse in Jamaica, induces me to make this note and add its description. They were taken from the trunk of a lance-wood tree. Mr. Gosse mentions that they melt in a candle like wax: in size it approaches Mr. Gray's second species, in colour and form it is different; it may be called *Ceroplastes jamaicensis*. *It is of a yellowish green colour; the base is almost hexagonal; there are six marginal plates, each of which is slightly notched in the middle below; the upper plate is notched behind and has two prominences in front.*

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XLIV.—*Mode of the Formation of the Spore in a species of Vesiculifera.* By G. H. K. THWAITES, Esq.

*To the Editors of the Annals of Natural History.*

GENTLEMEN,

2 Kingsdown Parade, Bristol, March 24, 1846.

HAVING recently met with a species of *Vesiculifera* just in that state of maturity calculated for showing to advantage the various stages in the development of the spore, I did not let slip the op-

portunity of satisfying myself as to the real character of the process, and I can give the following as the result, not only of my own observations, but fortified by the opinion of Mr. Berkeley as to their correctness, to whom I submitted specimens for examination.

The species in question may possibly be the *V. lacustris* of Mr. Hassall, with which species it would appear to agree in size, but I cannot determine with any certainty from his figure and description. The plant occurs in ponds on a common near Bristol, and is of a pleasant pale apple-green colour. The cells are usually from five to seven times as long as broad, and are lined with but a small quantity of endochrome which is disposed in a reticulate manner. Some of the cells, however, may be observed to be slightly inflated, and to contain a larger amount of endochrome than the rest: in each of these inflated cells a spore is subsequently formed, and in the following way:—The endochrome, after attaining a certain degree of density from an increase in its development, not from any derived from a contiguous cell, moves towards one end of its cell; it (the endochrome) shortly becomes divided into two very unequal portions, the larger and terminal one of which becomes converted into the spore, and the smaller portion is found to be separated from this by a single septum. A process has, in reality, taken place analogous to the fissiparous division of the cell of *Zygnema*; two cells have been formed within the original one, but in the *Vesiculifera* one of these new cells is the spore.

This is a fact of considerable physiological importance, and I shall have more to say on this subject in a future communication.

P.S. March 25, 1846.—Since writing the foregoing I have received a letter from Mr. E. Jenner, who is well-acquainted with the species intended by Mr. Hassall's descriptions, informing me that the *Vesiculifera* mentioned above is the *V. concatenata* of that gentleman's work.

I have today examined very carefully specimens of *Vesiculifera æqualis*, Hassall, and find that the process of the formation of the spore is similar to what I have stated to take place in *V. concatenata*. In the *V. æqualis*, however, I have been able to trace the mode of development of the two or three contiguous spores, which are sometimes to be seen in the filaments of this species: the first spore is formed in the way I have previously mentioned, and arrives at considerable maturity before there is any appearance of one, contiguous to it, being produced; but it may then be seen that the smaller portion of endochrome, which had been separated just previously to the first spore being formed, and

which then occupied but little space in the cell, has become considerably increased in amount, an increase having also taken place in the length of the cell: at length the process of division, &c. occurs as before, and a second spore is formed adjoining the first. The formation of a third spore involves a similar chain of phænomena.

I am, Gentlemen, your very obedient servant,  
G. H. K. THWAITES.

XLV.—*On a species of Semnopithecus from the Peninsula of Malacca.* By THEODOR CANTOR, Esq., M.D., Civil Surgeon, Prince of Wales Island.

*To Richard Taylor, Esq.*

DEAR SIR,

Library, East India House, April 6, 1846.

[THE first notice of the species of *Semnopithecus* described in the accompanying essay by Dr. Cantor, is given in the 'Proceedings of the Zoological Society' for 1837, p. 14, by Mr. James Reid, who characterized it under the name of *obscurus* from a specimen in the Society's collection; the locality of the particular specimen exhibited was unknown. Temminck subsequently described a *Semnopithec* very concisely with the name of *Semn. leucomystax*, stating doubtfully that the *S. obscurus* of Reid might perhaps belong to the same species. See *Verhandelingen over de Natuurlyke Geschiedenis der Nederlandsche Bezittingen: Monographisch Overzicht van Semnopithecus*, p. 59, no. 4. Mr. Martin, in his 'Natural History of Quadrumana,' gives a more detailed account of the external characters of *Semnopithecus obscurus* of Reid, or the *Dusky Monkey*, referring to some specimens brought from Singapore by Mr. Cuming, and presented by him to the museum of the Zoological Society, and also to a specimen in the Paris museum, adding, that no particular details of the habits of this species had as yet been received; science is therefore indebted to Dr. Cantor for the first satisfactory account of the habits and peculiarities of this monkey, and I submit this essay to your consideration as deserving perhaps a place in the 'Annals of Natural History.'

The 'Proceedings of the Linnean Society' for April 1, 1845, contain the specific character of the *Semnopithecus halonifer*, with a few remarks extracted from Dr. Cantor's more detailed essay.—T. Horsfield.]

*Semnopithecus halonifer*, Cantor.

*S. nitide cinereo-nigrescens*; crista occipitis cana, abdomine subalbido; cauda subcinerea; facie, auribus, manibus, pedibus, tuberi-